

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Treib Industries Biorefinery - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region X

Subject: POLREP #5
Completion of Main Site Operations & Demobilization
Treib Industries Biorefinery
WAH 000 050 091
Ferndale, WA
Latitude: 48.8789186 Longitude: -122.7107528

To: Jeffrey Fowlow, EPA Region 10 (POLREP List)
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Robert Hildebrand, NPFC (POLREP List)
Bill Angel, Whatcom County Health Department
Brian Milchak, U.S. Department of the Interior
Jesse Stark, NOAA

From: Brooks Stanfield, On Scene Coordinator

Date: 4/7/2017

Reporting Period: Week 4

1. Introduction

1.1 Background

Site Number:	10PZ	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	OPA	Response Type:	Emergency
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	3/13/2017	Start Date:	3/13/2017
Demob Date:		Completion Date:	
CERCLIS ID:	WAH000050091	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:	E17004	Reimbursable Account #:	Z0ES

1.1.1 Incident Category

Emergency response. CERCLA and OPA concerns.

1.1.2 Site Description

Treib Industries is an approximately 34-acre industrial property. The site is currently not supporting any commercial activities or industrial operations however historically has been used for tall oil processing, as a biodiesel refinery, metal fabrications, and other small scale miscellaneous industrial operations.

1.1.2.1 Location

4242 Aldergrove Road - Ferndale (Whatcom County), Washington

The site is approximately 1.8 miles from the shoreline of the Strait of Georgia, a navigable water of the United States.

1.1.2.2 Description of Threat

EPA received initial reports from a site visit conducted by Washington Department of Ecology and Whatcom County Health Department, which outlined a deterioration of safety and environmental conditions on the property including but not limited to: hazardous substances that had released from containers or threatened to release, improper storage and labeling of chemical containers, oil being stored within failing secondary containment or no containment at all, and a complete lack of site security.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Most assessment tasks were completed prior to Week 4. Few new assessment activities were conducted during Week 4. See previous PolReps for preliminary assessment results preceding Week 4.

During Week 4, EPA and its response contractors made the following new discoveries:

- One additional open drum of demolition debris holding ACM. Like the previous two drums of ACM, the asbestos was not initially visible in the drums because it had been covered by several inches of sand/gravel as a cap. The drum was not labeled as having ACM, thus increasing the likelihood that this material could be improperly handled and create serious human health risks.
- Two sumps outside of the northwest and northeast corners respectively of Warehouse B were pumped of standing liquids and cleaned of sediment to the extent possible. Each sump appeared to have two approximately 4" pipes entering the sump. It is not clear where the pipes drain from or drain to but there are concerns that underground piping leading from both warehouses could have transported contaminants from floor drains (such as lead and petroleum hydrocarbons as were confirmed in warehouse drain sediment samples). Questions remain are whether contaminants may be transported either directly through piping into soil and groundwater or indirectly through a septic

system. Information provided by persons knowledgeable of the facility suggested that these sumps were in place to receive "blowdown" from the boiler inside the warehouse but the exact endpoint of piping is unknown. These discharges of boiler water would be intended to control boiler water parameters to minimize scale, corrosion, carryover, suspended solids, and other problems. It could not be confirmed that the sumps were still connected to the boiler.

- Two locked shipping containers reported to be storing tools of an associate to the property owner were opened and inspected. No environmental concerns were found. Containers were closed and locked as they were found.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Refer to PolRep #1.

2.1.2 Response Actions to Date

Refer to PolReps #'s 1-4 for activities prior to 4/3/17

Asbestos Containing Material (ACM)

All identified ACM, including the most recently discovered drum, was removed from the property on 4/6 by a licensed asbestos abatement contractor and disposed of at a licensed facility.

Tall Oil in Drums, Totes, and ASTs

EPA disposal contractors made three shipments of liquid tall oil for recycling during Week 4. After one 4,000-gallon vac truck transloaded 3,100 gallons of oil from drums and totes during Week 3, three vac trucks transloaded approximately 10,000 additional gallons of liquid tall oil out of a few remaining 275-gallon totes and two ASTs outside secondary containment (Tank #2 and Tank #3).

One additional vac truck removed approximately 4,000 gallons of oily water left in Tank 1.

Consolidation and solidification of tall oil liquids and sludge in drums and totes continued through most of the week inside Warehouse A; this task was completed on 4/6 and final shipments of solidified tall oil sludge took place on 4/7.

EPA contractors completed sealing openings on abandoned ASTs to avoid further accumulation of oily rainwater inside and to prevent the risk of discharge from these tanks. Contractors also installed straw wattles and sorbent boom in four areas as interim measures until site conditions allow for the removal of the remaining 12,000 gallons of liquid tall oil.

Contaminated Soils and Sediment

Sediment samples that had been collected from the concrete trenches located in the two warehouse buildings indicated that sediment from inside the smaller north-south "Warehouse B" were disposed of as hazardous waste due to high concentrations of lead. Water and sediments from the trench were pumped and excavated and packed in drums for disposal. Sediments from the drain in the larger east-west Warehouse A, were excavated and disposed of along with tall oil sludge.

Water from the two exterior sumps on the north end of Warehouse B was pumped and sediments were excavated to the extent possible.

Demobilization

EPA crews completed all removal actions of this project phase by Friday 4/7. Prior to demobilization:

- Equipment was used to repair any ruts in driveway areas;
- Contracted street sweepers cleaned Aldergrove Road of mud tracked offsite by trucks;
- Warehouse floors were cleaned with "floor dry" sorbent material to remove any residue from sludge solidification and historic spills;
- All materials that had been temporarily removed from warehouses to facilitate waste removal and sludge solidification operations were returned; and
- All waste generated from operations was removed from the site.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Agencies have begun the process of sharing records and information on past operations. Enforcement activities and PRP searches conducted by state and federal agencies will begin in the coming weeks.

2.1.4 Progress Metrics

ASTs inventoried: 50 (100%)

Containers inventoried 717 (100%)

Buildings cleared of CERCLA chemicals: 3 (100%)

Buildings cleared of tall oil: 3 (100%)

Gallons of liquid phase tall oil recovered from abandoned drums/totes: 3,600 (100%)

Gallons of tall oil recovered from seven targeted ASTs: 7,000 (40%)

Gallons of oily water recovered from sumps and targeted ASTs: 4,000 (100%)

* All waste stream quantities are estimates and will be finalized in the coming weeks.

Waste Stream	Medium	*Estimated Quantity	Manifest #	Recycling	Disposal
Glycerin crude	Liquid (gal)	6,750		X	
Tall oil	Liquid (gal)	11,600		X	
Tall oil sludge	Solid (cy)	185			X
ACM	Solid (cy)	8			X
Oily water	Liquid (gal)	4,000			X

CERCLA Chemicals	Containers	430			X
Contaminated sediment	Drums	2			X

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

Crews demobilized from the site on 4/7. The final pickup of the response office trailer and heavy equipment will take place on 4/9. Following the pickup of the remaining equipment, the gate will be locked and the property owner will be notified.

EPA has made arrangements to return to the site in the July/August timeframe to recover the remaining 12,000 gallons of liquid tall oil that is held within a cluster of five ASTs outside secondary containment in the northern section of the property (Tank #s 11 - 15). Because the tanks are located in a transitional wetland, the water table was too high to safely access the tanks with vac trucks during the wet spring months.

Temporary containment was left in place to prevent and monitor migration of spills or leaks from these tanks. EPA will work with Whatcom County Health Department and Washington Department of Ecology to monitor these tanks in the months leading up to removal of the remaining liquid tall oil.

2.2.1.2 Next Steps

EPA will finalize agency transition plan with partner agencies and finalize a monitoring plan with agencies and the property owner. EPA will coordinate with partner agencies to determine what follow-up soil and groundwater investigation steps may be prudent or needed based on the data and field observations generated during this removal action. The next few weeks will be focused on reporting, followed by planning for summer operations to recover the remaining liquid tall oil.

2.2.2 Issues

EPA was contacted by at least one party interested in exploring new industrial operations at the site in the future. Because of the complexity of liability, ongoing environmental concerns, and other challenges this site has in supporting redevelopment, at this time it is difficult for regulatory and permitting agencies to anticipate all of the issues and steps which new operators could need to address and be aware of in the future.

2.3 Logistics Section

Due to regional demand, procuring enough vac trucks to complete tall oil and oily water removal operations during Week 4 proved to be a challenge. Because demand is often at its peak during summer construction months, additional planning may be required in advance of the tall oil removal operations slated for the July/August timeframe.

Water service to the site had been cut off to the site for an unknown amount of time prior to the initiation of this removal action making decontamination operations more challenging. Whatcom County PUD assisted the response by locating an alternate source of water nearby and by allowing EPA to use several thousand gallons of water at no charge.

2.4 Finance Section

2.4.1 Narrative

As of 3/27/17:

CERCLA cost ceiling is \$255,300.
OPA cost ceiling is \$900,000

These are subject to change as more of the unknown conditions are assessed to a greater degree.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$593,000.00	\$316,000.00	\$277,000.00	46.71%
START	\$231,300.00	\$115,000.00	\$116,300.00	50.28%
Intramural Costs				
Total Site Costs	\$824,300.00	\$431,000.00	\$393,300.00	47.71%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

Valeriy Bizayev - START
Eric Lindeman - START

2.5.2 Liaison Officer

2.5.3 Information Officer

Suzanne Skadowski - EPA
Bill Dunbar - EPA

3. Participating Entities

3.1 Unified Command

3.2 Cooperating Agencies

Washington Department of Ecology
Washington Department of Archeology and Historic Preservation
Washington State Attorney General
Whatcom County Health Department
Whatcom County PUD
US Department of Interior
National Oceanic and Atmospheric Administration
US Coast Guard - National Pollution Funds Center

3.3. Cooperating tribes

Lummi Nation

4. Personnel On Site

Since PolRep # 4

EPA OSCs - 1
Washington Department of Ecology - 4
Whatcom County Health Department - 2
Whatcom County PUD - 1
EPA ERRS Contractors - 9
EPA START Contractors - 1

5. Definition of Terms

ACM - Asbestos Containing Material

AST - Aboveground Storage Tank

CERCLA - Comprehensive Environmental Response Compensation and Liability Act

DOT - US Department of Transportation

Ecology - Washington Department of Ecology

FirstStep- FirstStep method of hazard class categorization of unknown chemicals for purposes of identification, storage, transportation, and disposal.

OPA - Oil Pollution Act

PPE - Personal Protective Equipment

PPM - Parts Per Million

RCRA - Resource Conservation and Recovery Act - Federal statute governing the transportation, storage, and disposal of solid waste and hazardous waste.

Roll-off box - A transportable dumpster-like container capable of holding 20 cubic yards

Tall oil - also called "liquid rosin" or tallol, is a viscous yellow-black odorous liquid obtained as a by-product of the Kraft process of wood pulp manufacture when pulping mainly coniferous trees. It is treated as an oil under the federal Oil Pollution Act.

XRF - X-ray Fluorescence - a field instrument used to detect toxic metals and provide an estimate of concentrations in soil materials such as soil.

6. Additional sources of information

6.1 Internet location of additional information/report

EPA Emergency Response incident webpage for Treoil:
response.epa.gov/treoil

Washington Department of Ecology Toxic Cleanup Program webpage for Treoil:
<https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=950>

Bellingham Herald media reports on EPA response at Treoil:

<http://www.bellinghamherald.com/news/local/article142102174.html>
<http://www.bellinghamherald.com/news/local/article142051639.html>

King 5 media report on EPA response at Treoil:

<http://www.king5.com/news/local/epa-oil-refinery-clean-up/427405667>

6.2 Reporting Schedule

The next PolRep is anticipated following summer operations in the July/August 2017 timeframe.

7. Situational Reference Materials

Maps and site diagrams to be posted in the coming weeks to the documents section of the incident website:
www.response.epa.gov/treoil

